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Emerging threats to equitable implementation of ART in South Africa

The *Comprehensive Plan* for the expanded treatment of HIV in South Africa was lodged in November 2003. The guiding principles of this plan are “universal access to care and treatment for all, irrespective of race, colour, gender and economic status”, and equitable implementation. However, there are concerns that the provision of anti-retroviral treatment will exacerbate existing inequities, thereby undermining the very system that it seeks to build. Using a monitoring framework developed by EQUINET, this contribution seeks to identify the shortfalls in programme implementation and threats to achieving the equity goals that are emerging. Findings highlight ongoing concerns around weak monitoring systems and data collection that enable the development of equity profiles at a sub-national level, while limiting the extent to which progress in meeting the guiding principles may be assessed.

Bedreigings vir die regverdig implementering van ART in Suid-Afrika

Die *Komprensiewe Plan* vir die uitgebreide behandeling van MIV is in November 2003 in Suid-Afrika bekendgestel. Die rigtinggewende beginsels van hierdie plan is universele toegang tot sorg en behandeling vir almal, ongeag ras, kleur, geslag en ekonomiese status, en die regverdig implementering daarvan. Nogtans is daar kommer dat die voorsiening van antiretrovirale behandeling bestaande ongelykhede sal vererger en daardeur juis die sisteem wat dit probeer bou, sal ondermyn. Deur die aanwending van 'n moniteringsraamwerk wat deur EQUINET ontwikkel is, wil hierdie bydrae tekortkominge in programimplementering en ontwikkelende bedreigings vir die verwesening van billikheidsdoelstellings identifiseer. Bevindinge werp lig op voortgesette vrese oor swak moniteringsisteme en dataversameling om die daarstelling van billikheidsprofiel op 'n sub-nasionale vlak moontlik te maak. Dit werk beperkend in op die mate waarin vordering met voldoening aan die riglyne gemeet kan word.

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South Africa remains one of the most HIV-infected countries worldwide. The Actuarial Society of South Africa (ASSA) estimated that the total number of people living with HIV in South Africa in 2005 was 5.2 million. They further estimated that 520 000 of those South Africans who had AIDS were not receiving the required treatment, while approximately 124 000 were receiving treatment across both the private and public sectors (ASSA 2005).

Highly active antiretroviral treatment (HAART) has been provided on a limited scale in South Africa since 2000, but largely to the medically insured population through the for-profit private health sector (George & Whiteside 2002). Some individuals also receive treatment through non-profit organisations. Expansion of a public sector-driven programme was initially delayed due to a number of factors, including the excessive costs of drugs and diagnostic tools and the absence of a national plan.

In November 2003 a national framework for the expanded treatment of HIV was released in the form of the *Operational Plan for Comprehensive HIV and AIDS Care and Treatment for South Africa* (henceforth *Comprehensive Plan*) (NDoH 2003). The *Plan* set out a comprehensive approach to combating HIV and AIDS, detailing a multi-sector response to the pandemic which recognises the critical role of ARV drugs in the treatment of people with AIDS-defining disease.

A key target of the *Comprehensive Plan* was to ensure free, universal access to ART through the public health sector. Specifically, the *Comprehensive Plan* envisaged that by 2004, there would be at least one service point in every health district across the country and that within five years, there would be one service point in every local municipality — thus ensuring that all South Africans and permanent residents who required care and treatment for HIV and AIDS would have equitable access to this treatment. Implementation is largely the responsibility of the nine provincial Departments of Health with support in key areas from the National Department of Health. Delays in the implementation of the *Comprehensive Plan* led to the initial targets being moved forward by one year, from March 2004 to March 2005 (Mbeki 2004).

Among the guiding and fundamental principles of the *Comprehensive Plan* are “universal access to care and treatment for all, irrespective of race, colour, gender and economic status” and equitable implementation (NDoH 2003).

This document starts to outline what appear to be the emerging threats to achieving equitable implementation of the ART component of the *Comprehensive Plan*. It is structured as follows:

- Outline of the methods of information collection and limitations of the paper.
- Overview of the underlying concerns related to introducing ART.
- The potential impact of equitable health service provision.
- A description of the framework used to monitor implementation from an equity viewpoint.
- Fair policy development, monitoring and accountability through fair processes.
- Equitable access to ART looking at various demographic factors.
- ART programme integration into health care delivery.
- Human resource development issues in health care delivery.
- Recommendations: the need to raise levels of awareness related to the importance of increasing investment in supporting and monitoring the implementation of the *Operational Plan* from an equity perspective, as well as ensuring that existing inequities are not exacerbated.

1. Methods of information collection and limitations

Information for this paper is drawn from multiple sources. In line with the “three-ones” principle (UNAIDS 2004), the focus is on information and data available from routine monitoring systems and made available to civil society. Due to weak monitoring and communication systems in South Africa, this has necessitated supplementation by primary research and the collection of secondary information from conferences, workshops and meetings with multiple stakeholders. Although much of this information is not peer reviewed, it is the main information available to date and has therefore been included in this manuscript. Another limitation is that this paper was written in mid-2005, which means that additional data and subsequent information releases do not appear in this paper. Literature sourced from journals and grey sources also feed into this document. Keywords used in the search included HIV, AIDS, antiretroviral, equity and health systems.

2. Equity and antiretrovirals

South Africa has embarked on an ambitious plan to provide HAART treatment to all citizens and permanent residents by 2010. The approach adopted has a strong focus on equitable service provision (NDoH 2003).

The International Society for Equity in Health (ISEqH) defines equity as: “the absence of potentially remediable, systematic differences in one or more aspects of health across socially, economically, demographically, or geographically defined population groups or subgroups”. Seeking equity in health implies “addressing differences in health status that are unnecessary, avoidable and unfair” (ISEqH 2005). “In southern Africa, these differences typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region” (Ray & Kureya 2003).

McCoy (2003) suggests that an equity approach is different from a basic needs approach or poverty approach, which focuses on the poor and the disempowered without relating their condition to the rich and the powerful. Equity implies an approach that gives more to those who have little, and less to those who have much. Rather than the allocation of equal shares, equity implies the allocation of fair shares. Equity-motivated interventions should, therefore, aim to allocate resources preferentially to those with the worst health status (vertical equity), to address the power and ability of individuals and groups to make choices regarding health inputs and their capacity to enact their choices.

However, the potential for positive outcomes is reduced when health systems are inaccessible due to costs or physical location, or are dysfunctional due to poor funding, management and other factors. This is especially problematic if this is the situation at the primary health care level and district levels, as found in Malawi (Makwiza *et al* 2005), outcomes were reportedly negative.

Planning for equity thus entails identifying those most at risk of HIV infection in order to target prevention activities, and to identify those in need of care and treatment for HIV-related illness (Ray & Kureya 2003). In a resource-constrained health system the analysis of equity requires not only the assessment of who will receive the drugs but, more importantly, what impact the provision of ART will have on “equity” for the provision of broader health services (Kemp *et al* 2003).

Perhaps one of the greatest concerns is that the introduction of an ART programme onto an already strained health system may exacerbate inequity through the redirection of resources to a vertical ART programme implemented at the better resourced, central facilities, leaving the under-resourced facilities in peripheral areas with even less than before (Kemp *et al* 2003). Under such a scenario, the increased inequity in resource allocation and service provision would simply perpetuate and re-institutionalise the gross imbalances in health service provision and accessibility.

Similarly it is undesirable to perpetuate existing social disparities. Indicators of this may be included in eligibility criteria and selection procedures. Regular and consistent monitoring of the effect of ART programmes on broader development and equity goals is needed to ensure that these do not reinforce inequities and prejudice broader health sector and country development objectives. For example, in Zimbabwe, there has been a bigger concentration of treatment provision in Harare and Bulawayo, where HIV prevalence levels are much lower than in many of the outlying areas (Ray & Kureya 2003). This tendency to situate treatment in urban centres with superior resources reinforces and perpetuates inequities.

The provision of free medication in itself does not necessarily result in equitable outcomes. There are a variety of “hidden costs” associated with accessing care and treatment, which must also be considered. These may include travelling costs, including time taken to get to treatment centres and the distance some are required to travel. Opportunity costs incurred, such as child-care or loss of food security, also play an influential role in decisions to take-up and continue with treatment (Russell 2003). Additional studies are required in order to clarify the real direct non-treatment (transport, time off work, loss of productive time) costs to households affected by AIDS in Southern Africa. Bias towards a purely medical model of equitable delivery must be avoided in favour of a broader bio-socio-economic model which is more encompassing of the realities of poverty and inequity.

Ntuli *et al* (2003) speculate that, at least initially, provision of ART will exacerbate existing inequities. They further recommend that the strengthening of services necessary to provide ART must take place in a way that benefits disadvantaged areas and strengthens PHC services generally. This will require the restructuring, re-organisation and redis-

tribution of existing resources to facilitate reform of the underlying issues of the health system, and will need to be supported by increased financial, infrastructural and human resource allocations.

The scaling up of anti-retroviral treatment in South Africa therefore raises significant equity issues regarding who is able to access treatment. It is imperative that scaling-up does not further skew the distribution in resources away from primary health care in rural areas towards well-resourced urban tertiary facilities. Instead, ART provision should aim at facilitating the strengthening of health systems in general. This implies taking a broader view of the socio-economic determinants of health and taking into account circumstances that create vulnerability to HIV infection and progression to AIDS. It further requires the monitoring of efforts to implement ART to determine the extent to which programme implementation meets equity requirements and to identify threats to equitable implementation as they occur.

3. Monitoring equity

Given the potential for health systems to act as vehicles to combat poverty and inequity, it is essential that the extent to which equity principles are adhered to, and equitable outcomes achieved in health delivery and impact, are monitored (Makwiza *et al* 2005). Technical and consultative work conducted by EQUINET in 2003 and 2004 led to the development of a draft framework for monitoring equity in ART provision and the effects on health systems in southern Africa (Makwiza *et al* 2005). The draft framework contains seven core areas of monitoring. The first two relate to equity, justice and accountability, while the remaining five deal with critical areas related to equity, namely sustainability and efficiency. These are as follows:

- Fair policy development, monitoring and accountability through fair processes
- Equitable access to ART with realistic targets
- Fair and sustainable financing and accountable financial management
- ART programme integration into the delivery of the essential health package
- Prioritised human resource development to deliver the essential health package

- Sustainable and accountable purchase, distribution and monitoring of drugs and commodities for ART and the essential health package
- Ensuring that private sector ART provision complements and enhances public health system capacity.

This paper utilises a reduced format of this framework to identify some of the emerging threats to achieving equitable implementation of the ART component of the *Comprehensive Plan*.

4. Fair policy development, monitoring and accountability through fair processes

4.1 Developing the *Comprehensive Plan*

In July 2002 government established a Joint Health and Treasury Task Team (JHTTT) to investigate issues relating to the financing of an expanded response to HIV and AIDS. A particular focus of the Task Team was care and support for those infected and affected by HIV and AIDS. The JHTTT report provided options and scenarios of introducing anti-retroviral therapy for people living with AIDS (JHTTT 2003).

In August 2003, Cabinet instructed the Minister of Health to develop a plan detailing how ART could be implemented, and a National Task Team was established to undertake this task (NDoH 2003). The task team consisted of 18 members representing Department of Health staff, academics and researchers. Civil society, along with provincial representatives, was invited to make submissions to the Task Team. The *Comprehensive Plan* was finally approved by Cabinet and released to the public in November 2003. The consultative process embarked on was largely confined to people working mostly at policy level; and it can therefore be argued that the process failed to incorporate the voices of ordinary people infected and affected by HIV and AIDS. In Malawi, by contrast, a broad consultative process including canvassing opinions through television and radio programmes, consultative meetings and commissioned studies preceded the development of the Malawian ART Treatment Plan (Makwiza *et al* 2005).

Thus, while the process of developing the *Comprehensive Plan* did allow for broader participation by provinces, research institutions and civil society, it may be argued that the extremely limited time frame for

civil society participation and debate may well have led to less than ideal involvement and possibly the setting of unattainable standards which are more suited to a developed country context, such as the “doctor-driven” approach reflected in the *Plan*.

4.2 Health information systems, monitoring and evaluation

Accurate and readily available information is the cornerstone of any decision-making process. The ability to track and treat patients regardless of where they present, is key to ensuring suitable levels of adherence and monitoring treatment outcomes, as well as determining outcomes of programmatic interventions. A national ARV monitoring and evaluation (M&E) framework has been developed for the public sector in South Africa and distributed to provinces. Indicator definitions have been developed and a draft data flow protocol has been set out. Only a few indicators are included in the routine data collection system. Training within the provinces on this framework and M&E concepts has commenced. However, since ART implementation has already started nationwide, many provinces and individual sites have developed their own information systems resulting in duplication of data collection, as well as collection of data using non-standardised definitions and tools. These patient data forms vary in quality, quantity and content, while patient monitoring remains weak (Doherty *et al* 2005).

It is uncertain whether surveillance sites and facility-based surveys will be utilised to enhance data collection and evaluation efforts, although such systems have proven highly effective for other health-related programmes (Losos 1996, UNAIDS 1999).

Access to and sharing of information to inform the role of civil society groups and other institutions involved in the fight against HIV and AIDS remain a major challenge (JCSMF 2005). By the end of 2005, only one quarterly monitoring review had been released by the NDoH — in September 2004 — which focused predominantly on inputs rather than process and outcomes (NDoH 2004). Furthermore, a proper implementation schedule has not been developed and released. The secrecy surrounding implementation schedules and progress undermines the possibilities of success and contributes towards the perception of programmatic failure.

Given the significant challenges surrounding data collection and analyses, monitoring and understanding the ART programme from an equity perspective is extremely difficult. The following section attempts to pull together data from different sources to provide an overall picture of service provision and uptake from an equity standpoint.

5. Equitable access to ART with realistic targets

5.1 Accreditation process

In early 2004, teams from the national and provincial Departments of Health began a process of assessing the readiness of public facilities to provide ART. The assessment covered infrastructure, human resources, pharmaceutical services, laboratory support, physical infrastructure, information systems and other aspects deemed necessary to deliver ART. Some sites were accredited and able to start provision immediately. Those sites not meeting all the accreditation requirements submitted action plans to the Department (Mngadi 2005). By March 2005, 122 sites had been accredited nationally (NDoH 2005), while 113 were operational (Mahlathi 2005).

5.2 Patients receiving antiretroviral therapy

5.2.1 Provinces

The Western Cape was the first province to commence pilot ART provision projects and has exceeded its initial target set for March 2005. As reflected in Table 1, by mid-2005 it had reached almost 50% of those in need of treatment. The Northern Cape had reached 26% of those in need, closely followed by Gauteng (23.1%). Apart from Gauteng, however, these provinces have the lowest numbers (in absolute terms) of individuals in need of treatment relative to the other provinces. Conversely, KwaZulu-Natal, with almost 205 000 individuals in need of ART, only managed to reach 15.3% of those in need. Similar trends are evident for the Eastern Cape, Mpumalanga and the Free State where only a small proportion of their populations in need have been reached (ASSA 2005).

Table 1: Need and provision of ART per province, 2005

Province	Patients on ART	Untreated	Total	% treated
KwaZulu-Natal	31 296	173 193	204 489	15.3
Western Cape	13 498	13 649	27 147	49.7
Gauteng	4 668	135 374	176 042	23.1
Eastern Cape	1 986	54 722	65 708	16.7
Mpumalanga	10 401	51 531	61 932	16.8
Limpopo	9 787	33 068	42 855	22.8
Free State	8 177	40 706	48 883	16.7
Northern Cape	1 542	4 377	5 919	26.0
North West	11 210	46 762	57 972	19.3

Source: ASSA 2005

It is of concern then that provinces having the highest need also appear to be having among the lowest levels of coverage as a percentage and in absolute numbers.

5.2.2 Gender

Women comprise the majority of individuals infected with HIV and AIDS. The epidemic is fuelled among women for a number of reasons. Transactional and coerced sex, biological vulnerability, entrenched patriarchy, financial dependence on men and polygamous relationships all contribute to a climate where women are unable to negotiate safe sex practices with their partners. The effect of the epidemic is also borne disproportionately by women in their roles as caregivers, as home-based care becomes more common (Ntuli *et al* 2003).

Despite the increased vulnerability of women to HIV infection, demographic modeling and sero-prevalence surveys (Shisana & Simbayi 2002) suggest that around 45% of the HIV-positive population could be anticipated to be men and in need of care.

Because of weak data collection systems as outlined above, it is difficult to disaggregate patients by age or sex and other demographic variables at a national level, while provincial data remains sketchy. In spite of this, the Free State reported that in 2005, 68% of their public sector patients were females and 32% were males (FSDoH 2005).

Similar figures were reflected in the KwaZulu-Natal public sector data in 2004, with 69% female and 31% male (KZNDoH 2004). At a national level, among 66 public facilities providing adult HAART in late 2004, 65% were females and 35% were males. A further four facilities indicated that “more” females than males were enrolled and on treatment, confirming the trend to greater female enrolment and treatment (Stewart & Loveday 2005). These figures highlight the dual impact of the high burden of disease amongst women, combined with the under-utilisation of public health services by males.

This apparent under-utilisation of public health services by males may in part reflect preferential access to private health services for males, a disproportionate involuntary reliance by females on public health services, or male denial. Whatever the underlying causes, these need to be investigated and addressed to encourage a move towards more couple counselling and treatment to increase male participation and to capture the potentially positive consequences of such initiatives.

5.2.3 Urban/rural

There are significant challenges in rolling out and accessing antiretrovirals in rural areas. The number of rural-based facilities providing ART has increased over time as a percentage of total sites available to the public, as shown in Table 2. There is currently no available information on the need for ART disaggregated by urban/rural setting to allow analysis of suitability of provision relative to need by urban or rural location. The assessment of this is further compounded by weak infrastructure in rural areas, which creates additional barriers to care for rural-based populations. It is therefore difficult to assess the extent to which the level of provision of ART matches the need. Less than optimal infrastructure, fragile health systems and inadequate human resources further compound the challenges of providing quality care in resource constrained settings. There is a tendency to concentrate sites in urban areas which can support the provision of care (Makwiza 2005, Ray & Kureya 2003). Therefore, additional care must be taken to ensure that adequate provision is made in rural areas.

Table 2: Number of public facilities serving rural areas

Month	Facilities serving rural population	Total number of facilities
September 2003	3 (11%)	24
February 2004	6 (15%)	39
November 2004	24 (32%)	75

Source: Stewart & Loveday 2005

5.2.4 Paediatric provision

In 2004 it was estimated that there were 245 000 children under the age of 14 years infected with HIV, a prevalence of 1.7%. The majority of these (211 000) were believed to be in pre-AIDS stage (Dorrington *et al* 2004). National figures of children who were receiving treatment were not available at the time of writing, therefore the authors are making the assumption that the balance (34 000) were in need of treatment. ASSA (2005) estimated that in 2004, 538 255 people were infected and in need of treatment, of which children represented 6.3%. Unfortunately there are no current data on provincial paediatric treatment requirements.

In 2005, the Free State estimated that 8% of their public sector patients on treatment were children (FS DoH 2005). KwaZulu-Natal estimated that 8.8% of their public sector ART patients were children (Phili 2005), while 12% of the patients on treatment in Gauteng were children (Gauteng DoH 2005). The Western Cape was the most progressive, where 17% of all those on ART in the public sector were children (personal communication, Dr Andrew Boule, UCT). Thus, while some provinces have been able to provide a breakdown of the percentage of all child-patients on treatment, this does not allow analysis of the provision relative to need, and a quantitative equity analysis is not possible.

However, a number of specific challenges in scaling-up provision of ART to children have been identified and will have to be addressed in order to facilitate the enrolment and treatment of larger numbers of children. These include lack of paediatric knowledge and training for health staff and associated anxiety, lack of implementation of policies to utilise polymerase chain reaction (PCR) diagnostics; the lack of Medicine Control Council (MCC) registered ARV products; high costs of existing formulations; and the lack of WHO recommended dosing tables based on weight (MSF 2005).

HIV and AIDS research has often been guided by the disease burden of wealthier countries. Paediatric HIV and AIDS, which is uncommon in these countries, have tended to be neglected and there is a paucity of information on appropriate paediatric interventions. For example, little effort has been put into simplifying paediatric formulations. Given the high number of current and potential paediatric AIDS infections in southern Africa, it is important that a better understanding of treatment challenges be developed and that psychosocial issues related to paediatric HIV and AIDS be addressed.

Methods for targeting children for ART (especially in the context of the growing phenomenon of child-headed households), ways of monitoring and promoting adherence, the development of treatment guidelines, identifying special nutritional needs, the effect of HIV and AIDS on the girl-child, schooling and on education, are some examples of issues that need to be explored and understood if roll-out to children is to be successful and equitable.

5.3 Saturation of sites and treatment rationing

Although considerable money has been allocated to the delivery of ART in South Africa, there is currently insufficient capacity to treat all those in need. A number of ART sites have reached “premature” saturation levels with their present human resource capacity, where the staff complement is only able to manage fewer than expected patients, and they are struggling to expand their services to include all patients enrolled on their waiting lists (Abdullah 2005, Chapman 2005).

This could have severe ramifications for equitable service provision, as it could result in more resources being used to treat fewer patients and, therefore, leaving less to facilitate the expansion of services to clinic level, where those deemed most vulnerable access health services. This is particularly the case where initiating sites are hospitals as opposed to PHC clinics.

Given the lack of resources to treat all in need, the rationing of treatment services in one form or another is inevitable (Rosen *et al* 2005). Currently this rationing is indirect and implicitly favours those who are informed, can afford it, are in proximity to facilities, and/or have the time to wait in queues. In some instances clinicians are forced to make choices as to who can or cannot receive treatment, decisions they

are ill-equipped to handle. Implicit rationing is likely to increase the inequity in provision of, and access to services, while undercutting the potential societal benefits of the programme (Doherty *et al* 2005).

Deliberate or explicit rationing of services may allow the purposeful allocation of services to particular groups, such as health workers, women, children or other vulnerable groups as designated. While the choices made through a process of explicit rationing are contentious, this would promote transparent and rational decision-making processes. The choices and assumptions underlying service rationing are therefore of utmost concern (Rosen *et al* 2005), while care must be taken to ensure that any policy decisions remain rooted in the equity-principle. This debate needs to be open and informed through an improved understanding of the options available, value-judgements and decisions made, and the outcomes thereof.

6. ART programme integration into the delivery of the essential health package

McCoy & Shuping (2000) argue that integration of HIV programmes at both policy and operational level is essential for long-term sustainability and to improve on equity. Others highlight that the sustainability of ART hinges on its integration with PHC services (Heunis 2005).

Despite the recognition of the need to integrate HIV and PHC (such as TB) services in the *Comprehensive Plan* and good intention within provinces to do so, it appears that there is in fact minimal integration of ART with PHC services. The focus on increasing patient numbers has led to a largely vertical programme being implemented to date. Van Rensburg (2005) has stated that there has been a loss of the health system perspective: “the glorifying of the ART programme (in the Free State) has attracted attention and resources out of proportion”. This is evident even within ART services themselves, with the integration of assessment and treatment sites being unsatisfactory, especially in more urban areas (Van Rensburg-Bonthuyzen 2005).

Integration problems are also evident within HIV services. For example, in Lejweleputswa district (Free State) “there is no integration between treatment site, PMTCT (perinatal MTCT) site and paediatric site” (Seape 2005), while it has been suggested that PMTCT services

in the Western Cape and TB training in the Free State have been neglected as a result of the extensive focus on ART services (Doherty *et al* 2005).

Similarly, preventative health care remains the most cost-effective approach to HIV management. Although prevention is considered a key pillar of the *Comprehensive Plan*, prevention efforts are still falling short of what is needed (Doherty *et al* 2005). Thus, despite the recognition in the *Plan* that opportunity costs must be accounted for, there remains in practice a risk of an imbalance in resource allocation, and excessive focus on the treatment side rather than on prevention. There is an urgent need to integrate and institutionalise ART (Schneider 2005). This will ensure that there is no duplication and that overlaps between different components of PHC are avoided.

The delivery of TB and HIV services in the same place at the same time has been shown to increase patient adherence, improve the outcomes of treatment, increase the efficiency of the service delivered, and focus future efforts on real needs (Nunn 2004). It is estimated that one-third of all people with HIV have TB co-infection and 70% of TB cases are HIV-positive (International HIV/AIDS Alliance 2002). Sonnenburg *et al* (2005) indicate that incidence of TB doubles within the first year of HIV infection and that the risk increases in future years. Combining TB and HIV management meetings and operational activities can therefore improve treatment outcomes and promote efficient resource utilisation (Coetzee 2005).

When resources are utilised more efficiently and operations streamlined, this may create the dual benefit of simpler management systems, more rapid decision-making through availability of more accurate information, improved quality of services, and the creation of additional capacity which may be used specifically for the improvement of services directed towards those most in need.

7. Prioritising human resource development to deliver the essential health package

Human resource constraints continue to dominate as the single greatest impediment to the strengthening of health services and successful scaling up of ART services. The provision of ART in the absence of substantial strengthening of the overall health system has the potential to increase existing inequities between well and poorly resourced areas (McCoy 2003).

The *Comprehensive Plan* estimated that in order to ensure successful implementation, an additional 13 805 staff would be required by 2008 (NDoH 2003). According to the personal administration system (PERSAL), in mid-2005, 27.2% of the health professional public sector posts were vacant. These varied greatly between provinces, with 8% vacancies in the Western Cape compared to almost 44% in Mpumalanga province (PERSAL 2005). The current lack of human resource capacity within the South African public health system is therefore of great concern.

By 31 March 2005, the NDoH claimed that more than 1 060 health professionals had been recruited to support the ARV programme and more than 7 600 health personnel had been trained on the management, care and treatment of HIV and AIDS (Mngadi 2005). However, concerns have been raised that recruited staff have largely come from within the public health system and may simply represent a shift from existing services to the ART programme. Given that there is an overall staff shortage in the public health sector, this may undermine the provision of these existing services. Recruiting, training, managing, skilling and equipping staff are critical areas of human resources that must be urgently addressed (Doherty *et al* 2005). Efforts to stem and reverse the trend of staff migration between rural, primary centres to urban, tertiary centres and overseas are essential, while options of devolving responsibilities and increasing the scope of practice for some staff cadres must be explored (Padarath *et al* 2004).

Efforts to integrate and improve services and service quality, and thereby create capacity that may be directed towards those most in need, will require a strong, educated and multi-skilled staff compliment. It may therefore be argued that efforts to make service provision and service provision outcomes more equitable require significant investment in the human resource base underpinning the health system. Current staff shortages, combined with weak training systems therefore contribute directly towards the undermining of the efforts to improve equitable health service provision and render more socially desirable outcomes.

8. Summary

The national *Comprehensive Plan* for the expanded treatment of HIV in South Africa makes an unequivocal commitment to equitable implementation and the overall strengthening of health systems. However,

there are concerns that the provision of ART will exacerbate existing inequities. While this may be expected initially, extreme care must be taken to monitor and identify emerging threats in the medium to long term. Certainly the initial delays in developing and then implementing the public sector plan, and the progress in the private sector, contributed towards a skew in service towards wealthier, insured population. Using a reduced version of the framework developed by EQUINET through regional and international consultation, the following potential threats to achieving medium to long-term equity in the ART component of the *Comprehensive Plan* have been identified.

The consultative process was less than ideal and possibly resulted in the setting of unattainable standards more suited to a developed country context. There remain significant challenges surrounding data collection and analyses. Monitoring, and therefore understanding the ART programme from an equity perspective is extremely difficult. This in turn makes appropriate interventions difficult to formulate.

Available data suggest that progress in terms of reaching patients in need of ART may be mirroring existing patterns of inter-provincial inequity. The under-utilisation of public health services by males requires further investigation to better understand and address the barriers to treatment. Due to lack of data, whether the bigger enrolment at urban sites is in proportion to actual rural/urban need for treatment, cannot currently be assessed. Similarly, paediatric accessibility versus need cannot be appropriately assessed due to the lack of relevant, uniformly collected data.

The current lack of debate and absence of any clear policy relating to rationing appears to be resulting in a form of implicit rationing, which may marginalise those most in need. This, combined with low levels of service integration, inefficient services and systems, and a weak human resource base further suggests that existing resources may be insufficient to provide the quality and quantity of services required. The failure to do so will result in increased marginalisation of those most in need.

Redoubled efforts to achieve the stated goals of equitable implementation must be planned and implemented in order to counteract these emerging threats. While continuing to provide treatment as broadly as possible, it is essential that appropriate measures are developed directing resources in such a way that the stated goals of equitable implementation are achieved.

9. Recommendations and conclusions

While initial participation in the development of the *Comprehensive Plan* may have been limited, increased participation in implementation and evaluation of the programme could yield significant results. Indeed, participation by grass-roots civil society groupings is in line with good practice of primary health care. South Africa has a wealth of expertise at this level, and with more transparency on the side of the Department of Health, combined with concerted efforts by all role-players to heal fractured relations and align private, public and civil society resources, improved results should follow.

In particular, efforts must be made to take this approach in the poorer, less resourced provinces, rather than concentrating resources in the wealthier urban centres. However, in order to achieve this, clearer, more accurate and regularly communicated information is required that may help direct efforts. The need to standardise data collection tools and methods of calculating indices that are comparable and user-friendly is paramount. While there is a growing effort to achieve this, the ongoing secrecy around implementation schedules and existing data undermines collaborative efforts, transparency and perceived legitimacy of activities. In particular, there must be improved accuracy of data disaggregated by province, gender, age and rural/urban location.

While the possibilities of explicit forms of rationing are highly unpalatable in South Africa, the reality is that provision of ART to all those who need it is not possible in the short or medium term. Whether or not it is possible in the longer term, only time and experience will tell. This needs to be acknowledged as do the daily rationing decisions made by frontline clinicians in the absence of guidelines. The absence of guidelines for directing choices is a threat to equitable service delivery, as uninformed decisions may not be equitable. It is therefore essential that such a debate be opened — possibly leading to a set of guidelines directing the clinical decision-making process.

Similarly, greater inclusion of the private sector in programme implementation, and revising the health system itself to operate along “lean” or world class standards, could assist in efforts to integrate and streamline services thereby creating scope for expansion in more quality-driven operations. However, the ongoing problems related to human

resource development have to be resolved in order to create a stable base upon which to build an improved health system.

The failure to monitor and address these emerging threats may result in sub-optimal outcomes from investments surrounding implementation of the *Comprehensive Plan* and a re-institutionalisation of existing inequities, thereby undermining the very health system that the programme seeks to build.

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